

**Amendments to the Abstract:**

Particle detection and ~~characterising~~ characterizing apparatus has an insulating tube (50) along which the particles flow. Five electrodes (~~51, 52, 55, 56~~) and (57) spaced along the outside of the tube are connected via amplifiers (61) and (62) to a processor (68) arranged to measure the charge on the particles. The apparatus also includes a laser (~~11~~) and photomultiplier tube (~~23~~) arranged to measure the size of the particles so that the nature of the particles can be ~~characterised~~ characterized from their electrical charge and size.